

Abstract Submitted to the
International Conference on Strongly Correlated Electron Systems
University of Michigan, Ann Arbor
August 6-10, 2001

**Possible Nonmagnetic Origin for Heavy Electron behavior in $\text{PrFe}_4\text{P}_{12}$
evidenced by specific heat**

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The existence of a rare $4f^2$ -based heavy-fermion state (HFS) in filled-skutterudite $\text{PrFe}_4\text{P}_{12}$ has been confirmed by recent dHvA effect, specific heat, and resistivity measurements in applied fields where an anomalous ordered state (ODS) is suppressed. We report further precise measurements of the specific heat performed down to 0.1 K using a high-quality single crystal. Utilizing ^{141}Pr nuclear Schottky contribution as an *on-site probe* for the Pr magnetic moment, an upper bound for the ordered Pr magnetic moment is found to be $\leq 0.03 \mu_B/\text{Pr-ion}$ in zero field. This observation confirms that the primary order parameter in ODS is nonmagnetic, most probably of quadrupolar origin, in consistent with an expected non-Kramers doublet ground state. Significantly suppressed heavy-fermion behavior in ODS strongly indicates that the quadrupolar degree of freedom is essential for the heavy quasiparticle band formation in $\text{PrFe}_4\text{P}_{12}$.